

LAMPIRAN

Lampiran 1 Filtering

```

8 // ----PROSES FILTERING----
9 class Filtering
10 {
11     private $stopwords = array("ada", "adalah", "adanya", "adapun", "agak", "agakny", "agar", "akan", "akankah", "akhir", "akhir", "akhirnya", "aku", "akulah", "amat", "amatla
12
13     public function getToken($token, $q_kode, $nbwords2 = 5)
14     {
15         $koneksi = mysqli_connect("localhost", "root", "", "improved_knn_sidang");
16         global $koneksi;
17         $filter = str_word_count($token, 1);
18         array_walk($filter, array(
19             $this,
20             'filter'
21         ));
22         $filter = array_diff($filter, $this->stopwords);
23         $wordCount = array_count_values($filter);
24         arsort($wordCount);
25
26         $jumlah = count($wordCount);
27         foreach ($wordCount as $key=>$hasil)
28         {
29             $masukkan=mysqli_query($koneksi,"INSERT INTO q_filtering VALUES(NULL, '$key', '$q_kode')");
30             $wordCount = array_slice($wordCount, 0, $nbwords2);
31             return array_keys($wordCount);
32         }
33     private function filter($hasil, $key)
34     {
35         $hasil = strtolower($hasil);
36     private function setStopwords()
37     {
38         $this->stopwords = array();
39     }
40 }
41 }
42 }
43 }
44 }
45 }
46 }

```

Lampiran 2 Hasil Klasifikasi

```

46 // mysqli_query($koneksi,"TRUNCATE hasil_klasifikasi");
47
48 $query_hitung=mysqli_query($koneksi,"SELECT * FROM hasil_klasifikasi ORDER BY id_uji DESC") or die(mysqli_error($koneksi));
49 $row_hitung=mysqli_fetch_array($query_hitung);
50 $angka = 0;
51 if (isset($row_hitung['id_uji'])) {
52
53     $angka = $row_hitung['id_uji'];
54 }
55 if ($angka == NULL) {
56     $query_uji=mysqli_query($koneksi,"SELECT * FROM data_uji") or die(mysqli_error($koneksi));
57 } else {
58     $query_uji=mysqli_query($koneksi,"SELECT * FROM data_uji WHERE id_uji > '$angka'") or die(mysqli_error($koneksi));
59 }
60 while($row_uji=mysqli_fetch_array($query_uji))
61 {
62     $id_uji = $row_uji['id_uji'];
63     $skalamat_asli = $row_uji['document'];
64     // $q_kode = 'c';
65     $q_kode = $row_uji['id_uji'];
66 }
67 }

```

Lampiran 3 Case Folding

```

67 //ubah alfabet menjadi huruf kecil
68 $skalamat = strtolower($skalamat_asli);
69 //hilangkan tanda baca
70 $skalamat = str_replace(" ", "", $skalamat);
71 $skalamat = str_replace("!", "", $skalamat);
72 $skalamat = str_replace("?", "", $skalamat);
73 $skalamat = str_replace("(", "", $skalamat);
74 $skalamat = str_replace(")", "", $skalamat);
75 $skalamat = str_replace("=", "", $skalamat);
76 $skalamat = str_replace(":", "", $skalamat);
77 $skalamat = str_replace(";", "", $skalamat);
78 $skalamat = str_replace(".", "", $skalamat);
79 $skalamat = str_replace(",", "", $skalamat);
80 $skalamat = str_replace("-", "", $skalamat);
81 $skalamat = str_replace("_", "", $skalamat);
82 $skalamat = str_replace("!", "", $skalamat);
83 $skalamat = str_replace("?", "", $skalamat);
84 $skalamat = str_replace("(", "", $skalamat);
85 $skalamat = str_replace(")", "", $skalamat);
86 $skalamat = str_replace("=", "", $skalamat);
87 $skalamat = str_replace(".", "", $skalamat);
88 $skalamat = str_replace(",", "", $skalamat);
89 $skalamat = str_replace("-", "", $skalamat);
90 $skalamat = str_replace("_", "", $skalamat);
91 $skalamat = str_replace("!", "", $skalamat);
92 $skalamat = str_replace("?", "", $skalamat);
93 $skalamat = str_replace("(", "", $skalamat);
94 $skalamat = str_replace(")", "", $skalamat);
95 $skalamat = str_replace("=", "", $skalamat);
96 $skalamat = str_replace(".", "", $skalamat);
97 $skalamat = str_replace(",", "", $skalamat);
98 $skalamat = str_replace("-", "", $skalamat);
99 $skalamat = str_replace("_", "", $skalamat);
100 mysqli_query($koneksi,"TRUNCATE q_case_folding");
101 $masukkan=mysqli_query($koneksi,"INSERT INTO q_case_folding VALUES(NULL, '$skalamat', '$q_kode')");
102 // ----AKHIR DARI CASE FOLDING----

```

Lampiran 4 Tokenisasi

```

103
104
105 // ---PROSES TOKENISASI---
106 mysql_query($koneksi,"TRUNCATE q_token");
107 $query=mysql_query($koneksi,"SELECT q_case_folding, q_code FROM q_case_folding") or die(mysql_error($koneksi));
108 while($row=mysql_fetch_array($query))
109 {
110     $kalimat_asli = $row['q_case_folding'];
111     $q_kode      = $row['q_code'];
112
113     $token = str_word_count(strtolower($kalimat_asli), 1); //proses pemecahan menjadi token
114     foreach ($token as $key=>$hasil_token)
115     {
116         $masukkan2=mysql_query($koneksi,"INSERT INTO q_token VALUES(NULL, '$hasil_token', '$q_kode')");
117     }
118 }
119 // ---AKHIR PROSES TOKENISASI---

```

```

53 // ---PROSES TOKENISASI---
54 mysql_query($koneksi,"TRUNCATE token"); //kosongkan isi field
55 $query=mysql_query($koneksi,"SELECT * FROM case_folding") or die(mysql_error($koneksi));
56 while($row=mysql_fetch_array($query))
57 {
58     $kalimat_asli = $row['case_folding'];
59     $id_dok       = $row['doc_id'];
60     $kode_sentiment = $row['code_sentiment'];
61
62     // menghitung jumlah dan memecah kata dalam kalimat
63     $token = str_word_count(strtolower($kalimat_asli), 1);
64     foreach ($token as $key=>$hasil_token)
65     {
66         $masukkan2=mysql_query($koneksi,"INSERT INTO token VALUES(NULL, '$hasil_token', '$id_dok', '$kode_sentiment')");
67     }
68 }
69 // ---AKHIR PROSES TOKENISASI---

```

Lampiran 5 Stemming

```

133
134 // ---PROSES STEMMING---
135 require_once('klasifikasi/stemming.php');
136 mysql_query($koneksi,"TRUNCATE q_stemming");
137 $query=mysql_query($koneksi,"SELECT term, q_code FROM q_filtering") or die(mysql_error($koneksi));
138 while($row=mysql_fetch_array($query))
139 {
140     $kata = $row['term'];
141     $q_kode = $row['q_code'];
142     $hasil = stemming($kata);
143     if($hasil != "") //jika hasil stemming tidak kosong
144     {
145         $masukkan4=mysql_query($koneksi,"INSERT INTO q_stemming VALUES(NULL, '$hasil', '$q_kode')");
146         $stemming_datauji=mysql_query($koneksi,"INSERT INTO stemming VALUES(NULL, '$hasil', '$q_kode', 'data_uji')");
147     }
148 }
149 // ---AKHIR PROSES STEMMING---

```

```

127
128 // ---PROSES STEMMING---
129 mysql_query($koneksi,"TRUNCATE stemming");
130 include "klasifikasi/stemming.php"; //memanggil file dari luar file ini
131 $query=mysql_query($koneksi,"SELECT * FROM filtering") or die(mysql_error($koneksi));
132 while($row=mysql_fetch_array($query))
133 {
134     $kata = $row['term'];
135     $id_dok = $row['doc_id'];
136     $kode_sentiment = $row['code_sentiment'];
137     $hasil = stemming($kata); //proses stemming
138     if($hasil != "") //jika hasil stemming tidak kosong maka masukkan
139     {
140         $masukkan4=mysql_query($koneksi,"INSERT INTO stemming VALUES(NULL, '$hasil', '$id_dok', '$kode_sentiment')");
141     }
142 }
143 // ---AKHIR PROSES STEMMING---

```

Lampiran 6 TF-IDF

```

150 // PROSES PERHITUNGAN TF
151 //ambil semua data($teks)
152 $mysql_query($koneksi, "TRUNCATE q_index;");
153 $spengaduan = mysqli_query($koneksi, "SELECT doc_id FROM documents") or die(mysqli_error($koneksi));
154 $num_rows = mysqli_num_rows($spengaduan);
155 $query = mysqli_query($koneksi, "SELECT term FROM q_stemming ORDER BY id") or die(mysqli_error($koneksi));
156 while($row=mysqli_fetch_array($query))
157 {
158     $token = $row['term'];
159     $proses_token = explode(" ", trim($token)); // proses menghilangkan ganda
160
161     foreach ($proses_token as $j => $value) {
162         if ($proses_token[$j] != "") {
163             //berapa baris hasil yang dikembalikan query tersebut?
164             $scount = mysqli_query($koneksi, "SELECT Count FROM q_index WHERE Term = '$proses_token[$j]'" or die(mysqli_error($koneksi));
165             $num_rows = mysqli_num_rows($scount);
166
167             //jika sudah ada DocId dan Term tersebut , naikkan
168             //count(array+1); // tambahkan 1 pada nilai TF sebelumnya
169
170             if ($num_rows > 0) {
171                 $scount = mysqli_fetch_array($scount);
172                 $count = $scount['Count'];
173                 $count++; // jumlahkan count jika lebih dari 1
174                 mysqli_query($koneksi, "UPDATE q_index SET Count = $count WHERE Term = '$proses_token[$j]'" or die(mysqli_error($koneksi));
175             }
176             //jika count masih kosong, langsung simpan ke tindex
177             else
178             {
179                 mysqli_query($koneksi, "INSERT INTO q_index (Term, Count, Weight) VALUES ('$proses_token[$j]', 1, 0)" or die(mysqli_error($koneksi));
180             }
181         }
182     }
183 }
184 //end foreach
185 }
186 }
187 }

```



```

191 // ===PROSES PERHITUNGAN TF-IDF UNTUK QUERY===
192 //barapa Jumlah DocId total, n
193 $resn = mysqli_query($koneksi, "SELECT DISTINCT DocId FROM tindex");
194 $n = mysqli_num_rows($resn); // cek jumlah dokumen data training
195
196 //ambil setiap record dalam tabel tindex
197 //hitung bobot untuk setiap term dalam setiap DocId
198 $resrobot = mysqli_query($koneksi, "SELECT Id, Term, Count FROM q_index ORDER BY Id");
199 while($rowrobot = mysqli_fetch_array($resrobot))
200 {
201     $sterm = $rowrobot['Term'];
202     $stf = $rowrobot['Count'];
203     $sid = $rowrobot['Id'];
204
205     $resnterm = mysqli_query($koneksi, "SELECT Count(*) as N FROM tindex WHERE Term = '$sterm'");
206     $rownterm = mysqli_fetch_array($resnterm);
207     $nterm = $rownterm['N'];
208
209     // hitung TF-IDF
210     // $w = tf * log (n/N)
211     if ($Nterm > 0) {
212         $w = $stf * @log10($n/$Nterm);
213     } else {
214         $w = 0;
215     }
216     $tfidf = round($w, 4); //pebulatan
217     //update bobot dari term tersebut
218     $resupdaterobot = mysqli_query($koneksi, "UPDATE q_index SET Weight = $tfidf WHERE Id = $sid");
219 }
220 //end while $rowrobot
221 // ===PROSES AKHIR PERHITUNGAN TF-IDF UNTUK QUERY===
222 }

```

Lampiran 8 Hasil Filtering

IMPROVED K-NN

Klasifikasi Improved K-NN

Dashboard

Menu

- Data
- Klasifikasi
- Hasil Analisis

Hasil Filtering Dan Stemming

Show 10 entries

Search:

ID	Document	Hasil Filtering & Stemming
821	Padahal aplikasi pedulilindungi bagus untuk tracing.s1	aplikasi pedulilindungi bagus tracing s
822	Sistem Satu Data Vaksinasi Covid-19 mencakup integrasi data sistem keamanan dan mekansime verifikasi https t co fUjbf5WTC.s1	sistem data vaksinasi covid cakup integrasi data sistem aman mekansime verifikasi https t co fujbif wtc s
823	Di ingetin resleting kebuka abis nunjukin pedulilindungi ke security Awkward anyink wkwkwk.s1	ingetin resleting buka abis nunjukin pedulilindungi security awkward anyink wkwkwk s
824	"Belum lagi si rangga harus scan barcode #pedulilindungi ((eh tau nya teh si rangga belum paksinnn #aad: https t co cX3NTRc1bU".s3	si rangga scan barcode pedulilindungi eh tau nya teh si rangga om paksinnn aad: https t co cx ntrc bu s
825	ini pedulilindungi tiap buka sertif vaksin emg crash atau gmn dah gak bisa dibuka.s1	pedulilindungi buka sertif vaksin emg crash gmn dah gak buka s
826	whoever is tracking my pedulilindungi probably thinks i'm a freak because i always forget to checkout https t co kulDTGoLkz.s2	whoever is tracking my pedulilindungi probably thinks i m a freak because i always forget to checkout https t co kuldgtokz s
827	pedulilindungi error scan trus tugasnya baru bilang emang gabisa 10 menit setelah gw bediri depan barcode kyk orangg gila https t co UPwKGWLo1.s1	pedulilindungi error scan trus tugas bilang emang gabisa menit setelah gw diri barcode kyk orangg gila https t co upwkgwloi s
828	Pedulilindungi crash mulu.s2	pedulilindungi crash mulu s

Lampiran 7 Hasil Klasifikasi

IMPROVED K-NN

Klasifikasi Improved K-NN

Dashboard

Menu

- Data
- Klasifikasi
- Hasil Analisis

Hasil Klasifikasi

Show 10 entries

Search:

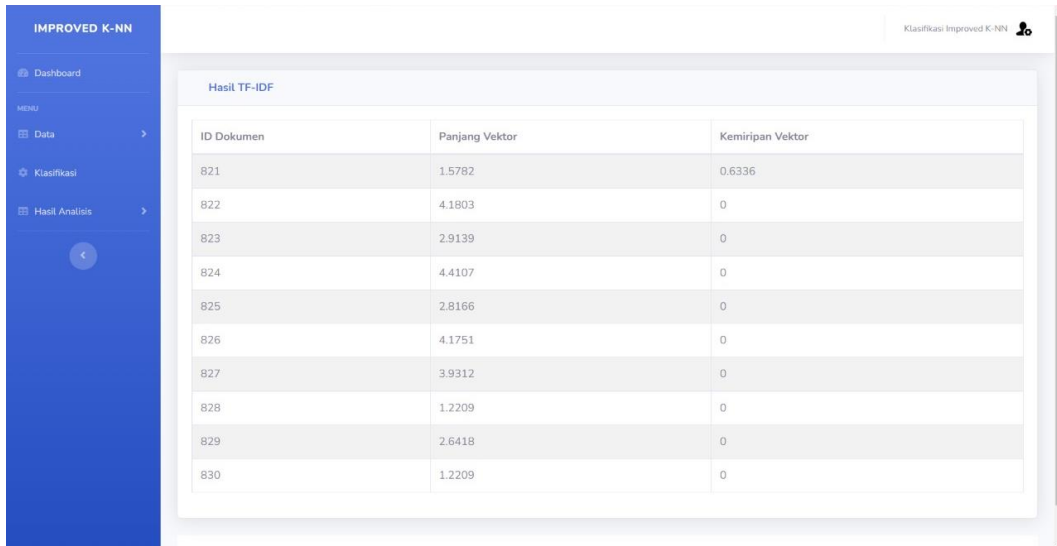
ID	Document	Klasifikasi Manual	Klasifikasi Sistem
313	tolong jangan setiap saat aplikanya minta diperbaharui dong.s1,	Positif	Positif
314	aplikasinya makin buruk loadingnya lama.s2,	Negatif	Positif
315	apk nya tidak membantu sama sekali.s2,	Negatif	Positif
316	susah banget mau buka aplikasi sering keluar sendiri.s2,	Negatif	Positif
317	tetap laksanakan protokol kesehatan dan gunakan aplikasi pedulilindungihttpscoWSmZBVskwK.s3,	Netral	Positif

Showing 1 to 5 of 5 entries

Previous 1 Next

Kategori	Persentase
Positif	13.333%
Negatif	6.667%
Netral	0.000%

Lampiran 9 Hasil TF-IDF



The screenshot shows a web application interface for 'IMPROVED K-NN'. The sidebar menu includes 'Dashboard', 'Data', 'Klasifikasi', and 'Hasil Analisis'. The main content area displays a table titled 'Hasil TF-IDF' with the following data:

ID Dokumen	Panjang Vektor	Kemiripan Vektor
821	1.5782	0.6336
822	4.1803	0
823	2.9139	0
824	4.4107	0
825	2.8166	0
826	4.1751	0
827	3.9312	0
828	1.2209	0
829	2.6418	0
830	1.2209	0